

Am



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/019,330	03/07/2002	Mihaly Toth	44201757 PAR	6246

2512 7590 02/24/2005

PERMAN & GREEN
425 POST ROAD
FAIRFIELD, CT 06824

EXAMINER

AVELLINO, JOSEPH E

ART UNIT	PAPER NUMBER
----------	--------------

2143

DATE MAILED: 02/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/019,330

Applicant(s)

TOTH ET AL.

Examiner

Joseph E. Avellino

Art Unit

2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 5/22/02 ^A
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 5/22/02 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/21/01.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

1. Claims 1-22 are presented for examination; claims 1, 18, 21, and 22 independent.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Claim 12 recites the limitation "the sessions are long-lived" which is a relative term". It is undeterminable from the scope of the claim what requirements are needed to classify a session as "long-lived". Correction is required. For examination purposes, the claim will be deemed that the session is able to return a response to the client.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2143

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4, 9-12, 15, 18, 21, 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Bayeh et al. (USPN 6,098,093) (hereinafter Bayeh).

7. Referring to claim 1, Bayeh discloses a method of managing a plurality of sessions (e.g. abstract), the sessions being between a plurality of terminals and a server (i.e. web server and client) and a server having a plurality of threads (i.e. servlets) the method comprising:

grouping the sessions into a plurality of groups (i.e. sending the client requests to a web server based on a load balancing algorithm provided by the host 59) (col. 8, lines 50-55);

assigning a thread (i.e. servlet) to each group (i.e. client requests sent to a particular web server) so that the assigned thread only handles the events of that group of sessions (the servlet is assigned to each web server, which determines the identity of the group of sessions) (col. 8, lines 42-67).

8. Referring to claims 2 and 3, Bayeh discloses the grouping occurs when a session is created or becomes active (it is understood that when a session is created, it is inherently becoming active) (col. 8, lines 42-58).

9. Referring to claim 4, Bayeh discloses one group is provided for each thread, such that there are equal numbers of groups and threads (i.e. equal numbers of groups, which are web servers receiving requests, and threads, which are servlet engines which will participate in the session management solution) (col. 8, lines 59-67).

10. Referring to claim 9, Bayeh discloses each group has a queue and each session puts its events into that queue (col. 12, line 29-58).

11. Referring to claim 10, Bayeh discloses the sessions are grouped by a thread referred to as an acceptor thread (i.e. load balancing process (col. 8, lines 42-58).

12. Referring to claim 11, Bayeh discloses the acceptor thread calls a function which is answered by a notification that a new session has been created and then assigns the new session to a particular session group (col. 8, lines 43-57).

13. Referring to claim 12, Bayeh discloses the sessions are long-lived (col. 9, lines 39-62).

Art Unit: 2143

14. Referring to claim 15, Bayeh discloses load balancing means is included in the assignment mechanism of the session (col. 8, lines 42-58).

15. Referring to claim 16, Bayeh discloses the sessions involve obtaining information or conducting transactions through the Internet (col. 8, lines 20-41).

16. Claims 18, 21 and 22 are rejected for similar reasons as stated above.

Claim Rejections - 35 USC § 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

18. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 5-8, 13, 14 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bayeh.

19. Referring to claim 5, Bayeh discloses the invention substantively as described in claim 1. Bayeh does not specifically disclose the sessions are assigned statically to particular threads, however does state that load-balancing techniques are well known in the art (col. 8, lines 55-58). This would lead one of ordinary skill in the art to search for load balancing techniques in which static assignment techniques (i.e. based on client's IP address or round-robin technique) are well known in the art. By this rationale, "Official Notice" is taken that both the concept and advantages of providing for static load balancing techniques are well known and expected in the art. It would be obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Bayeh to incorporate static load balancing techniques in order to easily route requests between entities, without undue processing and thereby increasing throughput and reducing overall system overhead.

20. Referring to claim 6, Bayeh discloses the invention substantively as described in claim 1. Bayeh does not specifically state a session is put into a first group in a first time period before suspension and put into a second group in a second time period following resumption, however when a session resumes, it will be processed by the front-end processor as it was a new session connection, and will be routed as required by the host 59, it will then be routed to a second group which may or may not be the

same as the first group. By this rationale it would have been obvious to one of ordinary skill in the art to understand that a session is put into a first group in a first time period before suspension and put into a second group in a second time period following resumption to simplify connection processing and reduce overall system overhead.

21. Referring to claim 7, Bayeh discloses the invention substantively as described in claim 6 above. Bayeh does not specifically state the second group is chosen on the basis of activity levels, however does disclose the sessions are assigned based on the relative levels of particular threads, however does state that load-balancing techniques are well known in the art (col. 8, lines 55-58). This would lead one of ordinary skill in the art to search for load balancing techniques in which incorporate load balancing assignment techniques (i.e. round-robin, percentage of activity monitored, etc.) are well known in the art. By this rationale, "Official Notice" is taken that both the concept and advantages of providing for relative load balancing techniques are well known and expected in the art. It would be obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Bayeh to incorporate load balancing techniques in order to easily route requests between entities efficiently, and effectively utilize processing time in order to maximize throughput of the system.

22. Referring to claim 8, Bayeh discloses the invention substantively as described in claim 6 above. Bayeh does not specifically state the second group is chosen on the basis of activity levels, however does disclose the sessions are assigned randomly to

Art Unit: 2143

particular threads, however does state that load-balancing techniques are well known in the art (col. 8, lines 55-58). This would lead one of ordinary skill in the art to search for load balancing techniques in which incorporate random load balancing assignment techniques which are well known in the art. By this rationale, "Official Notice" is taken that both the concept and advantages of providing for random load balancing techniques are well known and expected in the art. It would be obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Bayeh to incorporate random load balancing techniques in order to easily route requests between entities efficiently, reducing processing overhead by not requiring monitoring software for the processes, thereby increasing throughput and availability of the system.

23. Referring to claims 13 and 14, Bayeh discloses the invention substantively as described in claim 1. Bayeh does not specifically disclose the terminals are mobile terminals and cellular telephones, however it is well known that wireless mobile terminals and cellular telephones can act as client devices and request information from servers. By this rationale, "Official Notice" that both the concepts and advantages of providing for cellular telephones and mobile terminals as the terminals is well known and expected in the art. It would have been obvious to one of ordinary skill in the art to modify the system of Bayeh to include cellular phones as the terminals to allow the system to be accessed by a plurality of different entities, thereby providing a bigger

Art Unit: 2143

market for the system and allowing more clients to access the system, and further increase customer satisfaction.

24. Referring to claim 17, Bayeh discloses the invention substantively as described in claim 1. Bayeh does not specifically disclose the sessions are part of the Wireless Session Protocol (WSP), however the WSP is well known to easily provide session service from mobile devices to web servers and allow mobile terminals to access the Internet. By this rationale, "Official Notice" is taken that both the concept and advantages of providing for using the WSP protocol for sessions is well known and expected in the art. It would have been obvious to one of ordinary skill in the art to provide using the WSP for the devices in order to allow mobile devices to access the service, thereby allowing more clients to access the system, and further increase customer satisfaction.

25. Claims 19 and 20 are rejected for similar reasons as stated above.

Conclusion

26. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- USPN 6,633,914 by Bayeh et al.
- USPN 6,141,677 by Hanif et al.
- USPN 6,691,118 by Gongwer et al.

Art Unit: 2143

- USPN 6,249,800 by Aman et al.

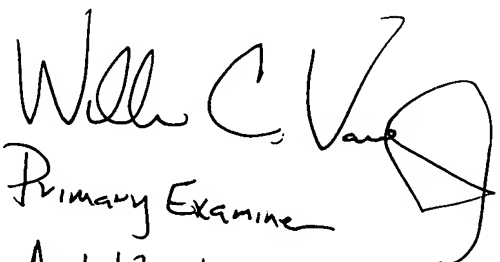
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph E. Avellino whose telephone number is (571) 272-3905. The examiner can normally be reached on Monday-Friday 7:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JEA
February 10, 2005



Primary Examiner
Art Unit 2143
William C. Vaughn, Jr.